

WO200153312 Comparison

ID AAM39781 standard; Protein; 772 AA.
XX
AC AAM39781;
XX
DT 22-OCT-2001 (first entry)
XX
DE Human polypeptide SEQ ID NO 2926.
XX
KW Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
KW peripheral nervous system; neuropathy; central nervous system; CNS;
KW Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
KW amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
KW chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
KW leukaemia.
XX
OS Homo sapiens.
XX
PN WO200153312-A1.
XX
PD 26-JUL-2001.
XX
PF 26-DEC-2000; 2000WO-US34263.
XX
PR 21-JAN-2000; 2000US-0488725.
PR 25-APR-2000; 2000US-0552317.
PR 09-JUL-2000; 2000US-0598042.
PR 19-JUL-2000; 2000US-0620312.
PR 03-AUG-2000; 2000US-0653450.
PR 14-SEP-2000; 2000US-0662191.
PR 19-OCT-2000; 2000US-0693036.
PR 29-NOV-2000; 2000US-0727344.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;
PI Wang J, Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J;
PI Zhao QA, Zhou P, Goodrich R, Drmanac RT;
XX
DR WPI; 2001-442253/47.
DR N-PSDB; AAI58937.
XX
PT Novel nucleic acids and polypeptides, useful for treating disorders
PT such as central nervous system injuries -
XX
PS Example 4; SEQ ID NO 2926; 10078pp; English.
XX
CC The invention relates to human nucleic acids (AAI57798-AAI61369) and
CC the encoded polypeptides (AAM38642-AAM42213) with nootropic,
CC immunosuppressant and cytostatic activity. The polynucleotides are useful
CC in gene therapy. A composition containing a polypeptide or polynucleotide
CC of the invention may be used to treat diseases of the peripheral nervous
CC system, such as peripheral nervous injuries, peripheral neuropathy and
CC localised neuropathies and central nervous system diseases, such as
CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
CC utilisation of the activities such as: Immune system suppression,
CC Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic

CC and thrombolytic activity, cancer diagnosis and therapy, drug screening,
CC assays for receptor activity, arthritis and inflammation, leukaemias and
CC C.N.S disorders.
CC Note: The sequence data for this patent did not form part of the printed
CC specification.

XX

SQ Sequence 772 AA;

Query Match 100.0%; Score 4037; DB 22; Length 772;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 772; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy      1 MRLSSLLALLRPALPLILGLSLGCSLSLLRVSWIQEGEDPCVEAVGERGGPQNPDSSRAR 60
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 mrlssllallrpalplilglslgcsllrvswiqgedpcveavgerggpqnpsrar 60

Qy     61 LDQSDDEDFKPRIVPYRDPNPKPYKKVLRTRYIQTELGSRERLLVAVLTSRATLSTLAVAV 120
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     61 ldqsdedfkdprivpyrddpnkpykkvlrtryiqtelgsrerllvavltsratlstlavav 120

Qy    121 NRTVAHHFPRLLYFTGQRGARAPAGMQVVSNGDERPAWLMSETLRHLHTHFGADYDWWFI 180
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 nrtvahhfprllyftgqrgarapagmqvvsngderpawlmsetlrhlhthfgadydwwfi 180

Qy    181 MQDDTYVQAPRLAALAGHLSINQDLYLGRAEEFIGAGEQARYCHGGFGYLLSRSLRLRLR 240
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 mqddtyvqaprlaalaghlsinqdlylgraeefigageqarychggfgyllsrsllrlr 240

Qy    241 PHLDGCRGDILSARPDEWLGRCLIDSLGVGCVSQHQGQQYRSFELAKNRDPEKEGSSAFL 300
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 phldgcrgdilsarpdewlgrclidslvgcvsqhggqqyrsfelaknrdpekegssafl 300

Qy    301 SAFAVHPVSEGTLMYRLHKRFSALELERAYSEIEQLQAQIRNLTVLTPEGEAGLSWPVGL 360
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    301 safavhvpsegtlmyrlhkrfsalelerayseieqlqaqirnltvltpegeaglswpvgl 360

Qy    361 PAPFTPHSRFEVLGWDFYFTEQHTFSCADGAPKCPLQGASRADVGDALETALEQLNRRYQP 420
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    361 papftphsrfevlgwdfyfteqhtfscadgapkcplqgasradvgdaletaleqlnrryqp 420

Qy    421 RLRFAQKQRLNNGYRRFDPARGMEYTLDLLLECVTQRGHRRALARRVSLRPLSRVEILPM 480
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    421 rlrfaqkqrllngyrrfdpargmeytldllecvtqrghrralarrvslrplsveilpm 480

Qy    481 PYVTEATRVQLVPLLVAAAAAPAFLEAFAANVLEPREHALLTLLLVIYGPREGGRGAPD 540
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    481 pyvteatrqlvplllvaaaaapafleafaanvleprehalltlllviygpreggrgapd 540

Qy    541 PFLGVKAAAAELERRYPGTRLAWLAVRAEAPSQVRLMDVVSKKHPVDTLFFLTWVTRPG 600
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    541 pflgvkaaaaelerrypgtrlawlavraeapsqvrlmdvvskkhpvdtlffltwvtrpg 600

Qy    601 PEVLNRCRMNAISGWQAFFPVHFQEFNPALSPQRSPPGPPGAGDPSPSPGADPSRGAPI 660
      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    601 pevlnrcrmnaisgwqaffpvhfqefnpalspqrspgpppgagdpssppgadpsrgapi 660
```

QY 661 GGRFDRQASAEGCFYNADYLAARARLAGELAGQEEEEALEGLEVMDVFLRFSGHLHFRV 720
 |||
 Db 661 ggrfdrqasaegcfynadylaararlagelagqeeeealeglevmdvflrfsghlhfrav 720
 QY 721 EPGLVQKFSLRDCSPRLSEELYHRCRLSNLEGLGGRAQLAMALFEQEQANST 772
 |||
 Db 721 epglvqkfslrdcsprlseelyhrcrlsnleglggraqlamalfeqeqanst 772

RESULT 2

AAB80269

ID AAB80269 standard; Protein; 772 AA.

XX

AC AAB80269;

XX

DT 24-APR-2001 (first entry)

XX

DE Human PRO339 protein.

XX

KW Human; PRO; dermatological; antipsoriatic; cytostatic; antiinflammatory;
 KW antiparkinsonian nootropic; neuroprotective; vulnerary; cardiant;
 KW antiangiogenic; vasotropic; antiasthmatic; antirheumatic; cancer;
 KW antiarthritic; antiinfertility; antidiabetic; antiviral; diabetes;
 KW ophthalmological; gene therapy; skin disease; gastrointestinal disorder;
 KW ischaemia; inflammation.

XX

OS Homo sapiens.

XX

PN WO200104311-A1.

XX

PD 18-JAN-2001.

XX

PF 22-FEB-2000; 2000WO-US04414.

XX

PR 07-JUL-1999; 99US-0143048.

PR 26-JUL-1999; 99US-0145698.

PR 28-JUL-1999; 99US-0146222.

PR 08-SEP-1999; 99WO-US20594.

PR 13-SEP-1999; 99WO-US20944.

PR 15-SEP-1999; 99WO-US21090.

PR 15-SEP-1999; 99WO-US21547.

PR 05-OCT-1999; 99WO-US23089.

PR 29-NOV-1999; 99WO-US28214.

PR 30-NOV-1999; 99WO-US28313.

PR 16-DEC-1999; 99WO-US30095.

PR 20-DEC-1999; 99WO-US30911.

PR 20-DEC-1999; 99WO-US30999.

PR 05-JAN-2000; 99WO-US00219.

XX

PA (GETH) GENENTECH INC.

XX

PI Ashkenazi AJ, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;

XX

ID AAI58937 standard; cDNA; 2710 BP.
 AC AAI58937;
 DT 22-OCT-2001 (first entry)
 DE Human polynucleotide SEQ ID NO 1140.
 KW Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
 KW peripheral nervous system; neuropathy; central nervous system; CNS;
 KW Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
 KW amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
 KW chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
 KW leukaemia; ss.
 OS Homo sapiens.
 XX
 PN WO200153312-A1.
 XX
 PD 26-JUL-2001.
 XX
 PF 26-DEC-2000; 2000WO-US34263.
 XX
 PR 21-JAN-2000; 2000US-0488725.
 PR 25-APR-2000; 2000US-0552317.
 PR 09-JUL-2000; 2000US-0598042.
 PR 19-JUL-2000; 2000US-0620312.
 PR 03-AUG-2000; 2000US-0653450.
 PR 14-SEP-2000; 2000US-0662191.
 PR 19-OCT-2000; 2000US-0693036.
 PR 29-NOV-2000; 2000US-0727344.
 XX
 PA (HYSE-) HYSEQ INC.
 XX
 PI Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;
 PI Wang J, Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J;
 PI Zhao QA, Zhou P, Goodrich R, Drmanac RT;
 XX
 DR WPI; 2001-442253/47.
 DR P-PSDB; AAM39781.
 XX
 PT Novel nucleic acids and polypeptides, useful for treating disorders
 PT such as central nervous system injuries -
 XX
 PS Claim 1; SEQ ID NO 1140; 10078pp; English.
 XX
 CC The invention relates to human nucleic acids (AAI57798-AAI61369) and
 CC the encoded polypeptides (AAM38642-AAM42213) with nootropic,
 CC immunosuppressant and cytostatic activity. The polynucleotides are useful
 CC in gene therapy. A composition containing a polypeptide or polynucleotide
 CC of the invention may be used to treat diseases of the peripheral nervous
 CC system, such as peripheral nervous injuries, peripheral neuropathy and
 CC localised neuropathies and central nervous system diseases, such as
 CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
 CC lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
 CC utilisation of the activities such as: Immune system suppression,
 CC Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
 CC and thrombolytic activity, cancer diagnosis and therapy, drug screening,
 CC assays for receptor activity, arthritis and inflammation, leukaemias and
 CC C.N.S disorders.
 CC Note: The sequence data for this patent did not form part of the printed
 CC specification.
 XX
 SQ Sequence 2710 BP; 506 A; 821 C; 824 G; 559 T; 0 other;

Query Match 96.5%; Score 2692; DB 22; Length 2710;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 2692; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 98 gggggttagttccgacaccttcacagttgaagagcaggcagaaggagttgtgaagacagg 157

Db 7 ggggggttagttccgacaccttcacagttgaagagcaggcagaaggagttgtgaagacagg 66
 QY 158 acaatcttcttggggatgctgggtcctggaagccagcgggcttgcctctgtctttggcctc 217
 Db 67 acaatcttcttggggatgctgggtcctggaagccagcgggcttgcctctgtctttggcctc 126
 QY 218 attgaccccagggttctctgggttaaaactgaaagcctactactggcctgggtgcccatcaat 277
 Db 127 attgaccccagggttctctgggttaaaactgaaagcctactactggcctgggtgcccatcaat 186
 QY 278 ccattgatccttgaggctgtgcccctggggcaccacccctggcagggcctaccaccatgcg 337
 Db 187 ccattgatccttgaggctgtgcccctggggcaccacccctggcagggcctaccaccatgcg 246
 QY 338 actgagctccctgttggtctctgctgcggccagcgttccctcatcttagggctgtctct 397
 Db 247 actgagctccctgttggtctctgctgcggccagcgttccctcatcttagggctgtctct 306
 QY 398 ggggtgcagcctgagcctcctgcgggtttcctggatccagggggaggagaagatccctg 457
 Db 307 ggggtgcagcctgagcctcctgcgggtttcctggatccagggggaggagaagatccctg 366
 QY 458 tgtcagggctgttaggggagcaggagggccacagaatccagattcgagagctcggctaga 517
 Db 367 tgtcagggctgttaggggagcaggagggccacagaatccagattcgagagctcggctaga 426
 QY 518 ccaaagtgatgaagacttcaaaccgccgattgtccctactacagggaccccaacaagcc 577
 Db 427 ccaaagtgatgaagacttcaaaccgccgattgtccctactacagggaccccaacaagcc 486
 QY 578 ctacaagaaggtgctcaggactcgggtacatccagacagagctgggtcccggtgagcgggt 637
 Db 487 ctacaagaaggtgctcaggactcgggtacatccagacagagctgggtcccggtgagcgggt 546
 QY 638 gctgggtggctgtcctgacctcccgagctacactgtccactttggccgtggctgtgaaccg 697
 Db 547 gctgggtggctgtcctgacctcccgagctacactgtccactttggccgtggctgtgaaccg 606
 QY 698 tacggtggcccatcacttccctcggttactctacttcaactgggcagcggggggcccgggc 757
 Db 607 tacggtggcccatcacttccctcggttactctacttcaactgggcagcggggggcccgggc 666
 QY 758 tccagcagggatgcaggtggtgtctcatggggatgagcggcccgctggctcatgtcaga 817
 Db 667 tccagcagggatgcaggtggtgtctcatggggatgagcggcccgctggctcatgtcaga 726
 QY 818 gacctgcgcacaccttcacacacactttggggccgactacgactgggtcttcatcatgca 877
 Db 727 gacctgcgcacaccttcacacacactttggggccgactacgactgggtcttcatcatgca 786
 QY 878 ggatgacacatatgtgcaggccccccgctggcagcccttgcctggccacctcagcatcaa 937
 Db 787 ggatgacacatatgtgcaggccccccgctggcagcccttgcctggccacctcagcatcaa 846
 QY 938 ccaagacctgtacttaggcggggcagaggagttcattggcgcaggcgagcaggcccggtg 997
 Db 847 ccaagacctgtacttaggcggggcagaggagttcattggcgcaggcgagcaggcccggtg 906
 QY 998 ctgtcatgggggctttggctacctgttgcacggagttcctgcttctgtctgcggccaca 1057
 Db 907 ctgtcatgggggctttggctacctgttgcacggagttcctgcttctgtctgcggccaca 966
 QY 1058 tctggatggctgcgaggagacattctcagtgcccgctcctgacgagtggttggacgctg 1117
 Db 967 tctggatggctgcgaggagacattctcagtgcccgctcctgacgagtggttggacgctg 1026

Qy	1118	cctcattgactctctctgggcgtcggtctgtgtctcacagcaccagggggcagcagtatcgtctc	1177
Db	1027	cctcattgactctctctgggcgtcggtctgtgtctcacagcaccagggggcagcagtatcgtctc	1086
Qy	1178	atttgaactggccaaaaatagggaccctgagaaggaaggagctcggtttctctgagtgc	1237
Db	1087	atttgaactggccaaaaatagggaccctgagaaggaaggagctcggtttctctgagtgc	1146
Qy	1238	cttcgccgtgcaccctgtctccgaagggtaccctcatgtaccggctccacaaacgcttcag	1297
Db	1147	cttcgccgtgcaccctgtctccgaagggtaccctcatgtaccggctccacaaacgcttcag	1206
Qy	1298	cgctctggagttggagcgggcttacagtgaatatagaacaactgcaggctcagatccggaa	1357
Db	1207	cgctctggagttggagcgggcttacagtgaatatagaacaactgcaggctcagatccggaa	1266
Qy	1358	cctgaccgtgctgacccccgaaggggaggcagggtgagctggcccgctggggctccctgc	1417
Db	1267	cctgaccgtgctgacccccgaaggggaggcagggtgagctggcccgctggggctccctgc	1326
Qy	1418	tcctttcacaccacactctcgctttgaggtgctgggctgggactacttcacagagcagca	1477
Db	1327	tcctttcacaccacactctcgctttgaggtgctgggctgggactacttcacagagcagca	1386
Qy	1478	caccttctcctgtgcagatggggctcccaagtgccactacagggggctagcagggcgga	1537
Db	1387	caccttctcctgtgcagatggggctcccaagtgccactacagggggctagcagggcgga	1446
Qy	1538	cgtaggggtgatgcgttggagactgccctggagcagctcaatcggcgctatcagccccgcct	1597
Db	1447	cgtaggggtgatgcgttggagactgccctggagcagctcaatcggcgctatcagccccgcct	1506
Qy	1598	gcgcttccagaagcagcgactgctcaacggctatcggcgcttcgacccagcacggggcat	1657
Db	1507	gcgcttccagaagcagcgactgctcaacggctatcggcgcttcgacccagcacggggcat	1566
Qy	1658	ggagtacacctggacctgctggttgaatgtgtgacacagcgtgggcaccggcgggccct	1717
Db	1567	ggagtacacctggacctgctggttgaatgtgtgacacagcgtgggcaccggcgggccct	1626
Qy	1718	ggctcgcaggggtcagcctgctgcgggccactgagcggggtggaaatcctacctatgccccta	1777
Db	1627	ggctcgcaggggtcagcctgctgcgggccactgagcggggtggaaatcctacctatgccccta	1686
Qy	1778	tgtcactgaggccacccgagtgcagctggtgctgccactcctggtggtgtaagctgctgc	1837
Db	1687	tgtcactgaggccacccgagtgcagctggtgctgccactcctggtggtgtaagctgctgc	1746
Qy	1838	agccccggtttctctcgaggcggttgcagccaatgtcctggagccacgagaacatgcatt	1897
Db	1747	agccccggtttctctcgaggcggttgcagccaatgtcctggagccacgagaacatgcatt	1806
Qy	1898	gctcaccctgttgctgggtctacgggccacgagaaggtggccgctggagctccagaccatt	1957
Db	1807	gctcaccctgttgctgggtctacgggccacgagaaggtggccgctggagctccagaccatt	1866
Qy	1958	tcttgggggtgaaggctgcagcagcggagttagagcgacggtaccctgggacgaggtggc	2017
Db	1867	tcttgggggtgaaggctgcagcagcggagttagagcgacggtaccctgggacgaggtggc	1926
Qy	2018	ctggctcgtgtgctgagcagagggcccttcccaggtgcgactcatggacgtgggtctcgaa	2077
Db	1927	ctggctcgtgtgctgagcagagggcccttcccaggtgcgactcatggacgtgggtctcgaa	1986
Qy	2078	gaagcacctctgtggacactctcttcttcttaccacccgtgtggacaaggcctgggcccga	2137

Db	1987	 gaagcaccctgtggacactctcttcttcttaccacggtgtggacaaggcctgggcccga	2046
Qy	2138	agtcctcaaccgctgtgcgatgaatgccatctctggctggcaggccttctttccagtcca	2197
Db	2047	agtcctcaaccgctgtgcgatgaatgccatctctggctggcaggccttctttccagtcca	2106
Qy	2198	tttccaggagtccaatcctgcctgtcaccacagagatcacccccaggggccccgggggc	2257
Db	2107	tttccaggagtccaatcctgcctgtcaccacagagatcacccccaggggccccgggggc	2166
Qy	2258	tggccctgacccccctccccctcctgggtgctgacccctcccggggggctcctataggggg	2317
Db	2167	tggccctgacccccctccccctcctgggtgctgacccctcccggggggctcctataggggg	2226
Qy	2318	gagatttgaccggcaggcttctgcggagggtgcttctacaacgctgactacctggcggc	2377
Db	2227	gagatttgaccggcaggcttctgcggagggtgcttctacaacgctgactacctggcggc	2286
Qy	2378	ccgagccccggtggcagggtgaactggcaggccaggaagaggaggaagccctggaggggct	2437
Db	2287	ccgagccccggtggcagggtgaactggcaggccaggaagaggaggaagccctggaggggct	2346
Qy	2438	ggaggtgatggatgttttctccgggtctcagggtccacctctttcgggcccgtagagcc	2497
Db	2347	ggaggtgatggatgttttctccgggtctcagggtccacctctttcgggcccgtagagcc	2406
Qy	2498	agggctgggtgcagaagttctccctgcgagactgcagccacgggtcagtgaagaactcta	2557
Db	2407	agggctgggtgcagaagttctccctgcgagactgcagccacgggtcagtgaagaactcta	2466
Qy	2558	ccaccgctgccgcctcagcaacctggaggggctagggggccgtgccagctggctatggc	2617
Db	2467	ccaccgctgccgcctcagcaacctggaggggctagggggccgtgccagctggctatggc	2526
Qy	2618	tctctttgagcaggagcaggccaatagcacttagcccgctgggggcccctaacctcatta	2677
Db	2527	tctctttgagcaggagcaggccaatagcacttagcccgctgggggcccctaacctcatta	2586
Qy	2678	ccttttcctttgtctgcctcagccccaggaagggaaggcaagatgggtggacagatagaga	2737
Db	2587	ccttttcctttgtctgcctcagccccaggaagggaaggcaagatgggtggacagatagaga	2646
Qy	2738	attggtgctgtatttttttaaataatgaaaatgttattaacatgtctttctgcc	2789
Db	2647	attggtgctgtatttttttaaataatgaaaatgttattaacatgtctttctgcc	2698